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**United States Patent** [19]

Klein et al.

[11] **Patent Number:** **5,233,997**[45] **Date of Patent:** **Aug. 10, 1993****[54] NON-INVASIVE MEASURE OF INTESTINAL TRANSIT TIME AND USES THEREOF**

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[58] Field of Search ..... **128/654, 898, 716, 718-720; 600/3-5; 604/49; 424/2, 9**

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**[57]****ABSTRACT**

A measurement test for gastrointestinal transit time, including the steps of administering a dose of labeled glycosyl ureide, measuring the labeled CO<sub>2</sub> and determining the amount of CO<sub>2</sub> over time is described. The assay can be used for measuring the effectiveness of drugs, the effect of drugs on gastrointestinal motility diagnoses of gastrointestinal motility disease measuring the effectiveness of treatment, and the effect of diet on motility.

**11 Claims, 8 Drawing Sheets**